

Delete paragraph 1 on page 64, lines 1-8 and replace with:

A3
Next, the mapping index for one of the equidistant servers is calculated using a predefined equation, STEP 2408. In particular, for $k=0$ to the number of equidistant servers-1, the mapping index is equal to the $[(\text{node_number}) \bmod (\text{number_of_equidistant_servers}) + k] \bmod (\text{number_of_equidistant_servers})$, where mod refers to the module operation defined as the integer remainder of a division operation.

In the Claims:

Please cancel claims 3-6, without prejudice.

Please add new claims 7-14. All claims are reproduced herein for the Examiner's convenience.

A4
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C1
1. (UNCHANGED) A method of managing cluster configurations of a computing environment, said method comprising:

executing a distributed configuration component on a plurality of nodes of a cluster of said computing environment; and

providing configuration consistency of said cluster using the distributed configuration component.

2. (UNCHANGED) The method of claim 1, wherein said providing comprises comparing data in a local storage with data in a global storage to determine whether a node can join said cluster.

3. (CANCELED)

4. (CANCELED)

5. (CANCELED)

6. (CANCELED)

7. (NEW) The method of claim 1, wherein said providing configuration consistency comprises comparing data in a local storage with data in a global storage to determine whether one or more components of said cluster are to be initiated.

8. (NEW) The method of claim 1, wherein said providing configuration consistency comprises controlling, at least in part, one or more operations associated with said cluster.

9. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of a define cluster operation used to create the cluster, and an undefine cluster operation used to erase a definition of the cluster.

10. (NEW) The method of claim 8, wherein said one or more operations comprise a modify cluster operation used to modify one or more attributes of a definition of the cluster.

11. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of a define node operation used to define a node to the cluster, and an undefine node operation used to erase a definition of a node of the cluster.

12. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of a define registry server node operation used to define a particular node in the cluster as a registry server node, and an undefine registry server node operation used to remove a node definition as a registry server node.

13. (NEW) The method of claim 8, wherein said one or more operations comprise a modify node operation used to change one or more attributes of a definition of a node of the cluster.

14. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of an online cluster operation used to initiate placing one or more nodes of the cluster online, and an offline cluster operation used to initiate placing one or more nodes of the cluster offline.

15. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of an online node operation used to place a node of the cluster online, and an offline node operation used to place a node of the cluster offline.

16. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of an online registry server operation used to initiate a system registry process on a node of the cluster, and an offline registry server operation used to stop a system registry process of a node of the cluster.

17. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of a define subnetwork operation used to define a subnetwork of the cluster, and an undefine subnetwork operation used to delete a subnetwork definition from the cluster.

18. (NEW) The method of claim 8, wherein said one or more operations comprise a modify subnetwork operation used to modify one or more attributes of a subnetwork definition.

19. (NEW) The method of claim 8, wherein said one or more operations comprise at least one of a define network operation used to create a network of the cluster, and an undefine network operation used to erase a network definition of the cluster.

20. (NEW) The method of claim 8, wherein said one or more operations comprise a modify network operation used to modify one or more attributes of a network definition.

21. (NEW) The method of claim 1, further comprising commencing execution, via an operating system of the computing environment, the distributed configuration component.

22. (NEW) The method of claim 1, further comprising maintaining one or more data structures usable in providing configuration consistency.

23. (NEW) The method of claim 22, wherein at least one data structure of said one or more data structures is stored in local storage and global storage.

24. (NEW) The method of claim 22, wherein said one or more data structures comprise a cluster data structure associated with said cluster.

25. (NEW) The method of claim 24, wherein said cluster data structure comprises a unique cluster identifier for the cluster.

26. (NEW) The method of claim 22, wherein said one or more data structures comprise at least one node definition data structure for at least one node of said plurality of nodes of said cluster.

27. (NEW) The method of claim 22, wherein said one or more data structures comprise a registry server nodes data structure identifying one or more registry server nodes of said cluster.

28. (NEW) A system of managing cluster configurations of a computing environment, said system comprising:

a distributed configuration component executing on a plurality of nodes of a cluster of said computing environment; and

means for providing configuration consistency of said cluster using the distributed configuration component.

29. (NEW) The system of claim 28, wherein said means for providing comprises means for comparing data in a local storage with data in a global storage to determine whether a node can join said cluster.

30. (NEW) The system of claim 28, wherein said means for providing configuration consistency comprises means for comparing data in a local storage with data in a global storage to determine whether one or more components of said cluster are to be initiated.

31. (NEW) The system of claim 28, wherein said means for providing configuration consistency comprises means for controlling, at least in part, one or more operations associated with said cluster.

32. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of a define cluster operation used to create the cluster, and an undefine cluster operation used to erase a definition of the cluster.

33. (NEW) The system of claim 31, wherein said one or more operations comprise a modify cluster operation used to modify one or more attributes of a definition of the cluster.

34. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of a define node operation used to define a node to the cluster, and an undefine node operation used to erase a definition of a node of the cluster.

35. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of a define registry server node operation used to define a particular node in the cluster as a registry server node, and an undefine registry server node operation used to remove a node definition as a registry server node.

36. (NEW) The system of claim 31, wherein said one or more operations comprise a modify node operation used to change one or more attributes of a definition of a node of the cluster.

37. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of an online cluster operation used to initiate placing one or more nodes of the cluster online, and an offline cluster operation used to initiate placing one or more nodes of the cluster offline.

38. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of an online node operation used to place a node of the cluster online, and an offline node operation used to place a node of the cluster offline.

39. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of an online registry server operation used to initiate a system registry process on a node of the cluster, and an offline registry server operation used to stop a system registry process of a node of the cluster.

40. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of a define subnetwork operation used to define a subnetwork of the cluster, and an undefine subnetwork operation used to delete a subnetwork definition from the cluster.

41. (NEW) The system of claim 31, wherein said one or more operations comprise a modify subnetwork operation used to modify one or more attributes of a subnetwork definition.

42. (NEW) The system of claim 31, wherein said one or more operations comprise at least one of a define network operation used to create a network of the cluster, and an undefine network operation used to erase a network definition of the cluster.

43. (NEW) The system of claim 31, wherein said one or more operations comprise a modify network operation used to modify one or more attributes of a network definition.

44. (NEW) The system of claim 28, further comprising an operating system of the computing environment to commence execution of the distributed configuration component.

45. (NEW) The system of claim 28, further comprising means for maintaining one or more data structures usable in providing configuration consistency.

46. (NEW) The system of claim 45, wherein at least one data structure of said one or more data structures is stored in local storage and global storage.

47. (NEW) The system of claim 45, wherein said one or more data structures comprise a cluster data structure associated with said cluster.

48. (NEW) The system of claim 47, wherein said cluster data structure comprises a unique cluster identifier for the cluster.

49. (NEW) The system of claim 45, wherein said one or more data structures comprise at least one node definition data structure for at least one node of said plurality of nodes of said cluster.

50. (NEW) The system of claim 45, wherein said one or more data structures comprise a registry server nodes data structure identifying one or more registry server nodes of said cluster.

51. (NEW) A system of managing cluster configurations of a computing environment, said system comprising:

a plurality of nodes of a cluster of said computing environment; and

a distributed configuration component of the cluster to execute on the plurality of nodes and to provide configuration consistency of said cluster.

52. (NEW) At least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method of managing cluster configurations of a computing environment, said method comprising:

executing a distributed configuration component on a plurality of nodes of a cluster of said computing environment; and

providing configuration consistency of said cluster using the distributed configuration component.

53. (NEW) The at least one program storage device of claim 52, wherein said providing comprises comparing data in a local storage with data in a global storage to determine whether a node can join said cluster.

54. (NEW) The at least one program storage device of claim 52, wherein said providing configuration consistency comprises comparing data in a local storage with data in a global storage to determine whether one or more components of said cluster are to be initiated.

55. (NEW) The at least one program storage device of claim 52, wherein said providing configuration consistency comprises controlling, at least in part, one or more operations associated with said cluster.

56. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of a define cluster operation used to create the cluster, and an undefine cluster operation used to erase a definition of the cluster.

57. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise a modify cluster operation used to modify one or more attributes of a definition of the cluster.

58. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of a define node operation used to define a node to the cluster, and an undefine node operation used to erase a definition of a node of the cluster.

59. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of a define registry server node operation used to define a particular node in the cluster as a registry server node, and an undefine registry server node operation used to remove a node definition as a registry server node.

60. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise a modify node operation used to change one or more attributes of a definition of a node of the cluster.

61. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of an online cluster operation used to initiate placing one or more nodes of the cluster online, and an offline cluster operation used to initiate placing one or more nodes of the cluster offline.

62. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of an online node operation used to place a node of the cluster online, and an offline node operation used to place a node of the cluster offline.

63. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of an online registry server operation used to initiate a system registry process on a node of the cluster, and an offline registry server operation used to stop a system registry process of a node of the cluster.

64. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of a define subnetwork operation used to define a subnetwork of the cluster, and an undefine subnetwork operation used to delete a subnetwork definition from the cluster.

65. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise a modify subnetwork operation used to modify one or more attributes of a subnetwork definition.

66. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise at least one of a define network operation used to create a network of the cluster, and an undefine network operation used to erase a network definition of the cluster.

67. (NEW) The at least one program storage device of claim 55, wherein said one or more operations comprise a modify network operation used to modify one or more attributes of a network definition.

68. (NEW) The at least one program storage device of claim 52, wherein said method further comprises commencing execution, via an operating system of the computing environment, the distributed configuration component.

69. (NEW) The at least one program storage device of claim 52, wherein said method further comprises maintaining one or more data structures usable in providing configuration consistency.

70. (NEW) The at least one program storage device of claim 69, wherein at least one data structure of said one or more data structures is stored in local storage and global storage.

71. (NEW) The at least one program storage device of claim 69, wherein said one or more data structures comprise a cluster data structure associated with said cluster.

72. (NEW) The at least one program storage device of claim 71, wherein said cluster data structure comprises a unique cluster identifier for the cluster.

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73. (NEW) The at least one program storage device of claim 69, wherein said one or more data structures comprise at least one node definition data structure for at least one node of said plurality of nodes of said cluster.

74. (NEW) The at least one program storage device of claim 69, wherein said one or more data structures comprise a registry server nodes data structure identifying one or more registry server nodes of said cluster.
